

TECHNICAL SERVICE INSTRUCTIONS

ISSUED BY

KRIESLER AUSTRALASIA PTY. LTD.

31-4 RECEIVER BATTERY (VIBRATOR TYPE)—TABLE MODEL

INSTALLATION INSTRUCTIONS.—As recommended in booklet issued with receiver.

SOURCE OF POWER.—6 Volt Accumulator.

FREQUENCY RANGES.—Broadcast Band—540 K.C. to 1650 K.C.

Shortwave Band—18 M.C. to 6 M.C.

The frequency ranges indicated above are common to every 31-4 receiver unless information to the contrary is given on the relevant instruction sheet.

CONTROLS (left to right).—TONE (Normal, S/W & Speech, High Fidelity), VOLUME, BATTERY SWITCH (off, receiver "on," receiver and lamps "on"), TUNING, BAND SELECTOR (Shortwave, broadcast).

CABINET.—Standard bakelite type comprising—

1—Top Part No. 20-19.

1—Base Part No. 20-30.

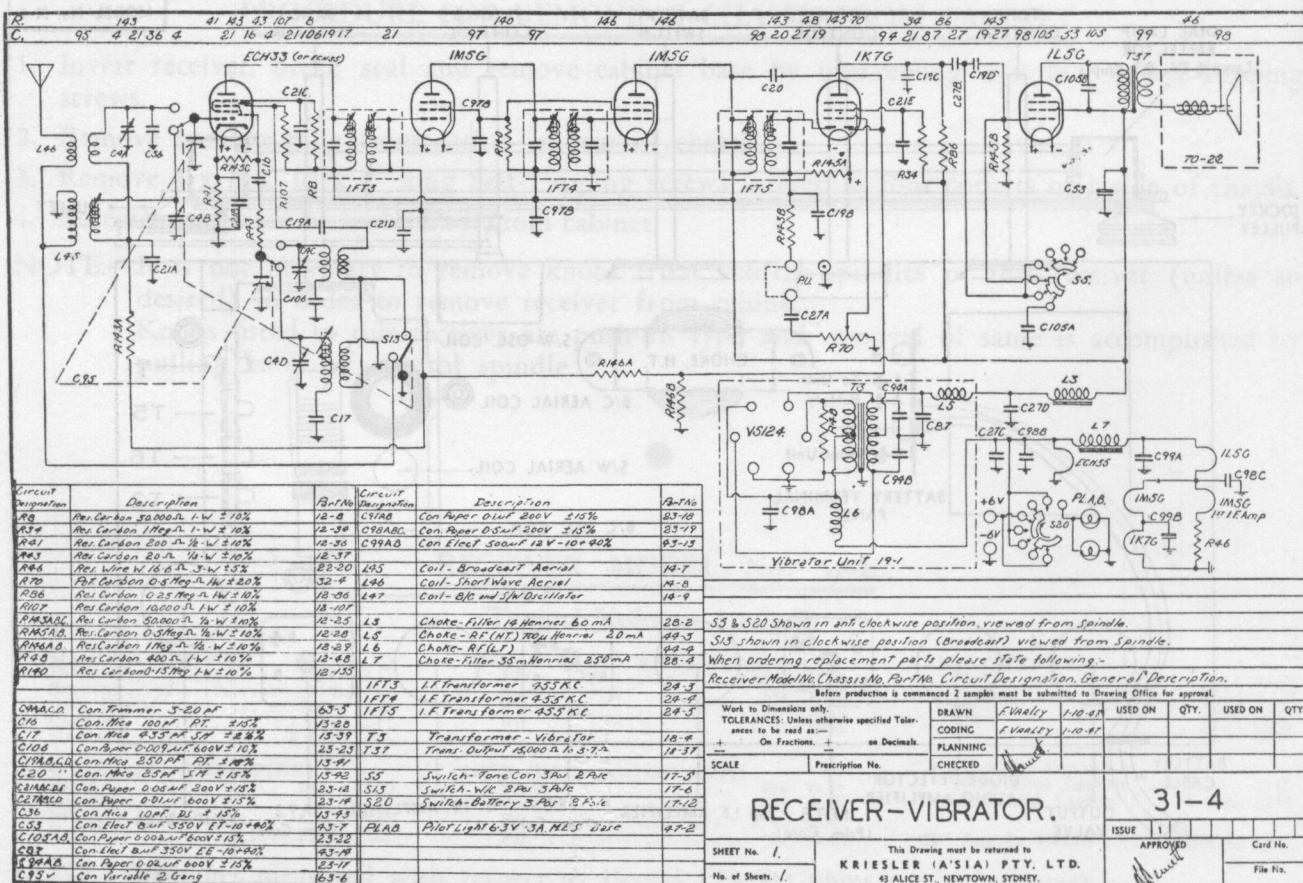
IMPORTANT.—When making enquiries concerning any particular receiver, please quote full model number and serial number, e.g.—

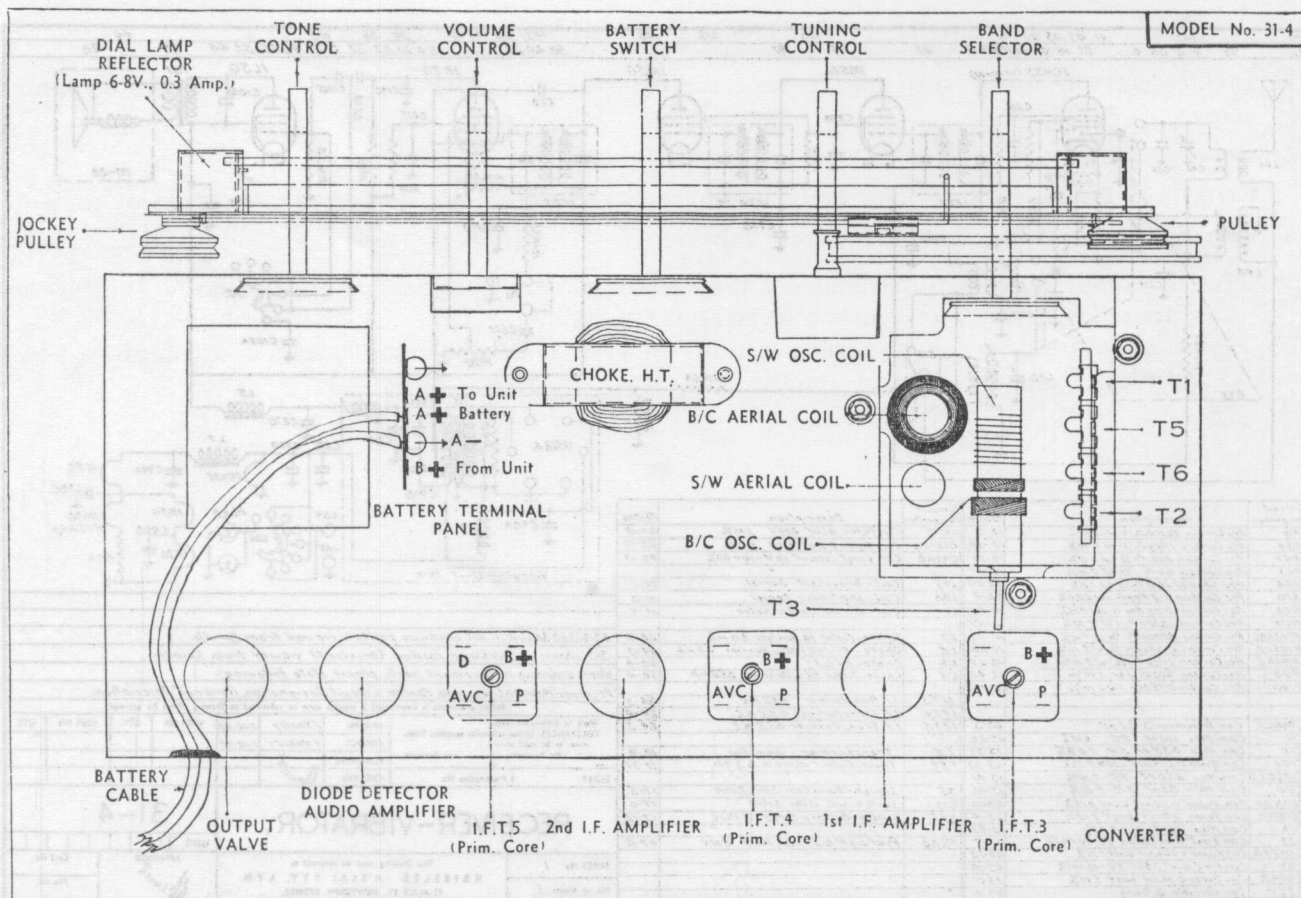
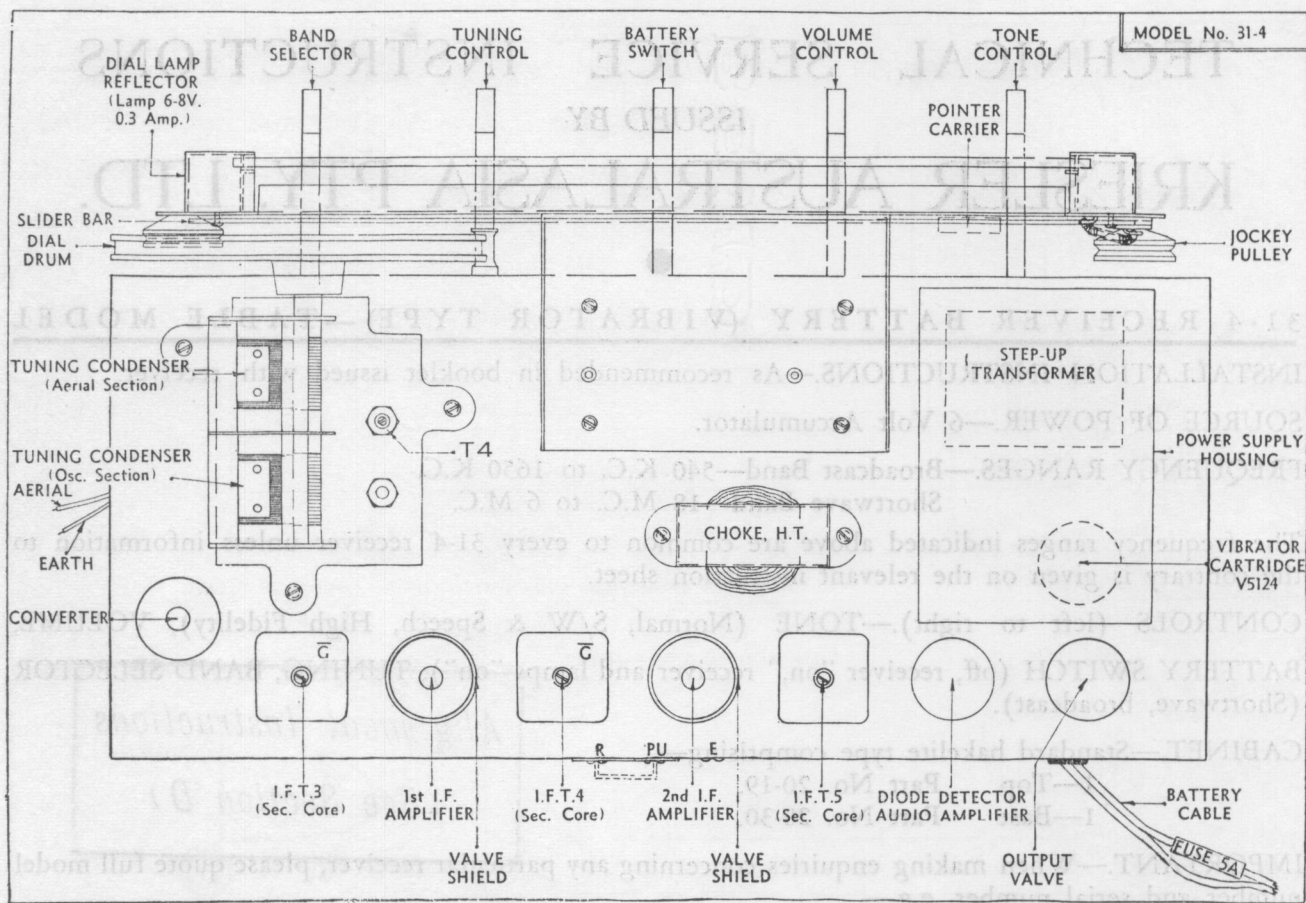
Model No. 31-4A, Serial No. 1625.

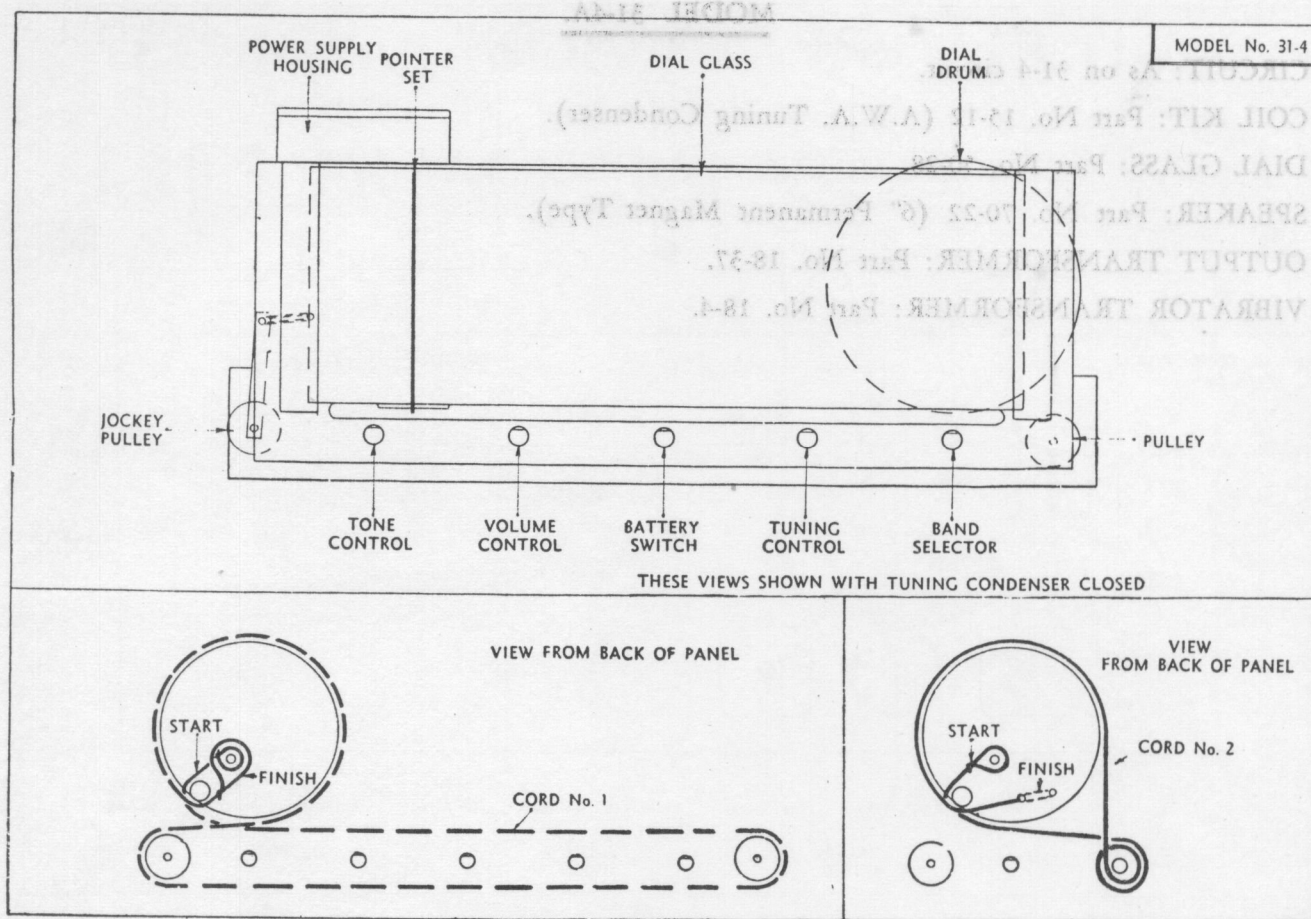
RELEASED.—October, 1947.

Alignment Instructions

(See Section D)







PROCEDURE FOR REMOVING CHASSIS FROM CABINET.

1. Invert receiver, break seal and remove cabinet base by unscrewing 4 x No. 6 Self-Tapping screws.
2. Remove speaker plug from socket in rear of chassis.
3. Remove 4 x No. 10 x $\frac{3}{8}$ " long Self-Tapping screws located in four corners of inside of chassis.
4. Receiver may now be withdrawn from cabinet.

NOTE.—It is not necessary to remove knobs from control spindles of this receiver (unless so desired) in order to remove receiver from cabinet.

Knobs fitted to this receiver are push-on type and removal of same is accomplished by pulling knob off control spindle.

RECEIVER MODEL No. 31-4.

Typical Voltage Analysis.

ECH33 (CONVERTER)

| | |
|------------------|-------------|
| Plate | 144v. D.C. |
| Screen | 81v. D.C. |
| Osc. Plate | 105v. D.C. |
| Cathode | 1.55v. D.C. |
| Heater | 6.05v. D.C. |

1M5G (1ST I.F. AMPLIFIER)

| | |
|--------------|------------|
| Plate | 144v. D.C. |
| Screen | 58v. D.C. |
| Fil. | 4.0v. D.C. |
| Fil. | 2.0v. D.C. |

1M5G (2ND I.F. AMPLIFIER)

| | |
|--------------|------------|
| Plate | 144v. D.C. |
| Screen | 58v. D.C. |
| Fil. | 4.0v. D.C. |
| Fil. | 2.0v. D.C. |

1K7G (DET. AUDIO AMP.)

| | |
|--------------|------------|
| Plate | 47v. D.C. |
| Screen | 21v. D.C. |
| Fil. | 2.0v. D.C. |
| Fil. | 0v. D.C. |

1L5G (OUTPUT)

| | |
|--------------|------------|
| Plate | 140v. D.C. |
| Screen | 144v. D.C. |
| Fil. | 5.9v. D.C. |
| Fil. | 4.0v. D.C. |

"A" Battery Drain—

| | |
|----------------------|-------------|
| With Dial Lights ... | 1.9A. D.C. |
| Less Dial Lights ... | 1.49A. D.C. |

"B" Supply Drain

20m.A. D.C.

NOTE.—Voltages measured with respect to chassis (20,000 ohms per volt meter).

MODEL 31-4A.

CIRCUIT: As on 31-4 circuit.

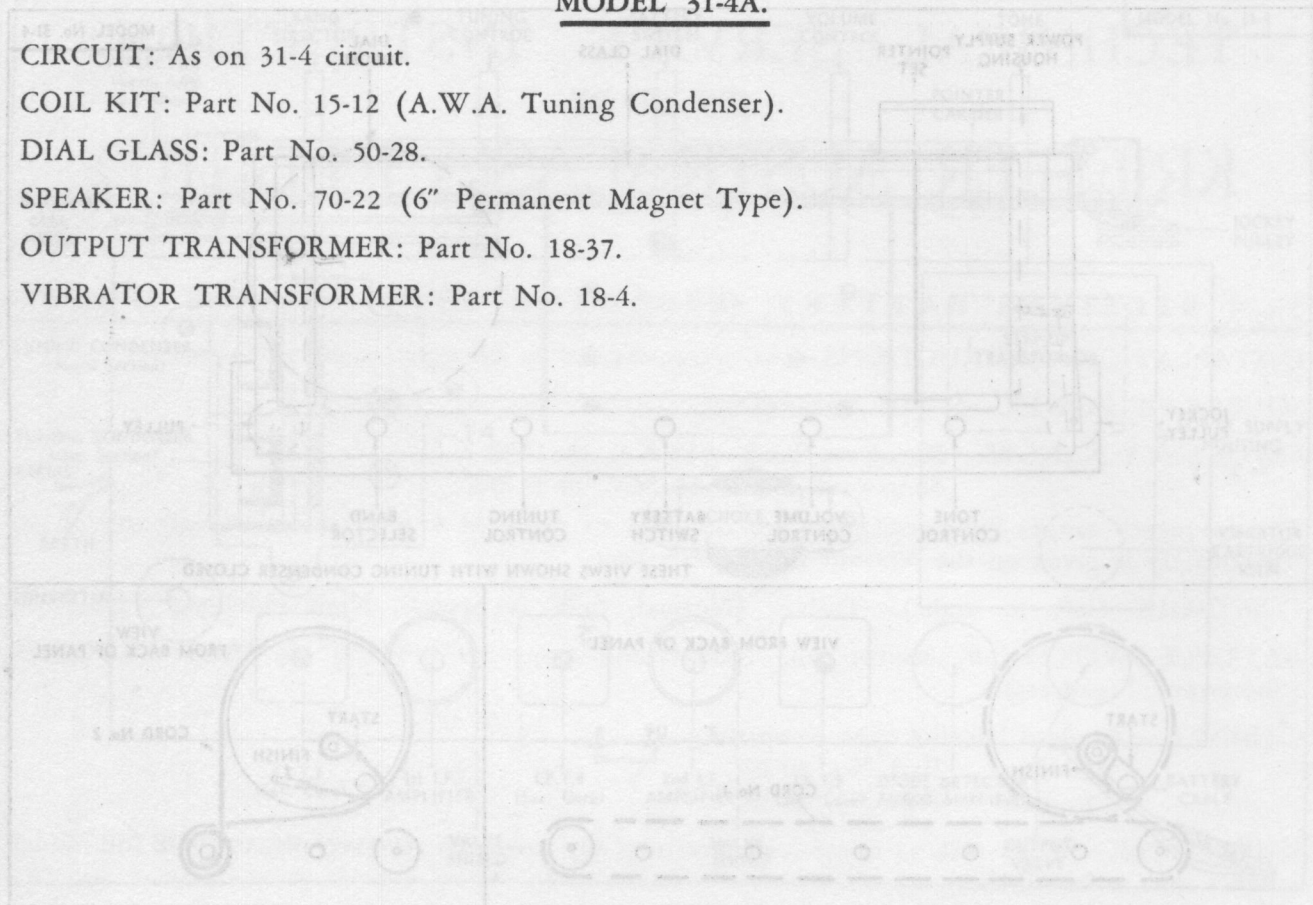
COIL KIT: Part No. 15-12 (A.W.A. Tuning Condenser).

DIAL GLASS: Part No. 50-28.

SPEAKER: Part No. 70-22 (6" Permanent Magnet Type).

OUTPUT TRANSFORMER: Part No. 18-37.

VIBRATOR TRANSFORMER: Part No. 18-4.



PROCEDURE FOR REMOVING CHASSIS FROM CABINET

1. Insert receiver break seal and remove cabinet base by unscrewing 4 x No. 6 Self-Tapping screws.
2. Remove speaker plug from socket in rear of chassis.
3. Remove 4 x No. 10 x 1/2" long Self-Tapping screws located in four corners of inside of chassis.
4. Receiver may now be withdrawn from cabinet.

NOTE—It is not necessary to remove knobs from control spindles of this receiver (unless so desired) in order to remove receiver from cabinet. Knobs fixed to this receiver are push-on type and removal of same is accomplished by pulling knob off control spindle.

RECEIVER MODEL No. 31-4

Typical Voltage Analysis

| REAR (INT. I.F. AMPLIFIER) | | FRONT (A.F. AMPLIFIER) | |
|----------------------------|-----------|------------------------|-----------|
| Plate | 100V D.C. | Plate | 100V D.C. |
| Screen | 100V D.C. | Screen | 100V D.C. |
| Control | 100V D.C. | Control | 100V D.C. |
| Grid | 100V D.C. | Grid | 100V D.C. |
| INT. (I.F. AMPLIFIER) | | INT. (A.F. AMPLIFIER) | |
| Plate | 100V D.C. | Plate | 100V D.C. |
| Screen | 100V D.C. | Screen | 100V D.C. |
| Control | 100V D.C. | Control | 100V D.C. |
| Grid | 100V D.C. | Grid | 100V D.C. |

NOTE—Voltages measured with respect to chassis (20,000 ohms per volt meter).